

## ABSTRACT

The current measuring device includes an upper solution chamber (3) and a lower solution chamber (8) whose bottom has a support layer (5) and measures a current flowing via an artificial lipid bilayer membrane (2) formed on a small hole (4) of the upper solution chamber (3), wherein the lower solution chamber (8) is provided below the upper solution chamber (3) by being surrounded with a bottom plate (6) and an interval keeping member (7a). An internal pressure of the lower solution chamber (8) is dropped so that the artificial lipid bilayer membrane (2) formed on the small hole (4) swells to the side of the lower solution chamber (8) so as to be thinner, and the thinner artificial lipid bilayer membrane (2) is supported by the support layer.